Author's response to reviews

Title: Advances in oral health knowledge of Greek navy recruits and their socioeconomic determinants

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PDF covering letter
Athanasios I. Zavras

Cover Letter

Paper: “Advances in oral health knowledge of Greek navy recruits and their socioeconomic determinants”

We thank the reviewers for their critical comments. We believe the paper has greatly improved as a result of the peer-review process.

We believe we have addressed all re-review comments of Dr. Astrom. Below, please find our detailed answers.

Comment 1) An abstract is lacking!!
The abstract must have been available, as we had “loaded” it during submission to BMC Oral Health (since our first submission).
An abstract is included in this re-submission. Please let us know if you can access it OK.

Comment 2) The introduction is less focused and does not underpin the stated aims of the study … should be rephrased

We agree with the reviewer that the Introduction was unfocused and that it needed re-phrasing. We did rephrase the introduction as follows:

“Although there is overwhelming evidence that periodontal disease and dental caries affect the majority of the population, their prevalence and severity varying according to age, sex, race, geographic areas, socioeconomic factors, local oral as well as systemic factors and methods of oral cleaning [1], there are no reliable national statistics in Greece. The available prevalence and incidence rates for both conditions depend on limited local evidence, as explained later. Lack of disease registries, lack of a functioning national primary care system, and absence of dedicated full-time research staff at major academic institutions are some of the reasons for such lack of nationwide information. The incomplete data that currently exists as a result of scarce surveys of oral health among children [2,3], as well as adults [4-8] suggest that both, periodontal disease and dental caries exhibit an overall high prevalence. It is also evident from these studies that the level of knowledge and the overall attitude towards various oral health issues were rated as low.”

We also agree with the reviewer that aim number 2 was a little vague and we re-phrased it as follows:
b) “to evaluate the possible impact of several social and economic trends and their role as indicators of the observed increased awareness of military recruits on issues of oral health in Greece”.

3) *I still miss a section where the items and questions addressed in the questionnaire survey are presented together with response scales*

The questions addressed in the questionnaire are presented in Table 1 and Table 2. Each of the above two tables first list the question and then provides the answer. For example, Question 1 of Table 1 would be: “Is gingival bleeding normal?” and the possible answers would be a) Yes, b) No and c) Do not Know. Most of the asked questions required such a response, except of the questions that required the subject to answer on the frequency of visit, in which case the answer was open to any number (continuous variable).

We recognize that if the Reviewer No. 1 did not understand what the questions were, then there may be some readers that may also will not. So we added one paragraph to the text, in the Materials and Methods section as follows: p.3, first paragraph:

“All recruits were asked to participate and were given a standardized questionnaire, administered by a team of 3 dentists - investigators; the questionnaire consisted of 13 different binary questions. Table 1 and Table 2 provide details about the questions. For example, the first question listed in Table 1 would be: “Is gingival bleeding normal?” and the possible answers would be a) Yes, b) No and c) Do not Know. Most of the asked questions required such a response, except for those items listed on Table 2 that required the subject to answer on the frequency of visit, in which case the answer was open to any given number (continuous variable).”

4) *I maintain that there is little evidence supporting the stated comparability of the two cohorts of recruits investigated in 1985 and 1996. In fact this is my main objection to the validity of the present findings. Although this is considered in the discussion section, I think any conclusions about time trends (changes across time) should be drawn more carefully. As demographic data on the individual level is lacking totally (I suppose also with respect to age), except for educational level, is difficult to provide empirical support for the claimed comparability.*

Several previous published reports exist to document the fact that the two cohorts were drawn from a wide population and are comparable. See the following references:

In addition to the above references, comparability is possible due to the following facts:

1) The observed educational stratification in 1996 is comparable with the one of 1985
2) Military service is obligatory in Greece for all males, regardless of socioeconomic status, education, income level, religion, or other social indicators.
3) Every male subject above the age of 19 has to undergo military training
4) There was no change in applicable laws regarding military service between 1985 and 1996
5) The age of the recruits ranges from 19-24, with just a 2% in 1985 and a 4% in 1996 that have received post-graduate education (above the University degree)

It is true that we only measured educational level and not other social or economic indicators of class. There are two main reasons for that. First, educational level has been found to stand as a surrogate for socio-economic status in Greece. Kyriazanos ID, et al. (Eur J Epidem 2001:17;501-504) report that low level salary is perfectly correlated with low education, whereas high level salary correlates perfectly with high educational status. The second reason we did not directly enquire for family income is because we know from other studies (reference: Zavras et al. Int J Cancer 2002) that asking such a direct question may alienate a great proportion of the subjects.

Also, later in the same point No. 4, “As presented it is unclear as to what group the asserted differences with respect to knowledge/attitude pertain.”

In the Results section we provide detailed explanation as to the direction of the changes. To help the readers further, Tables 1 and 2 present the raw data.

5) The results from secondary analyses of household data are provided to give supporting background information. … However, this part of the study could be reduced

We agree with the reviewer that we have provided a lot of information; some of the information may not necessarily be needed. Thus, we accepted the reviewer’s advice to reduce the tables and we eliminated Tables 5 (regional flow) and 6 (national manpower statistics) and the corresponding parts on the discussion.
We sincerely believe that all comments have been answered, that the study is of high scientific validity, and that it will add to the ongoing scientific discussion on oral health knowledge and socioeconomic conditions. We remain committed to high-quality research work and we are at your disposal for any further question.

Sincerely Yours,
Prof. A. Zavras